

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-6 (cancelled)

7. (currently amended): A yeast culture inoculum for use in a capsaicin fermentation medium for the preparation of a topical pain treatment initially comprising:

*a Capsicum sp.* cultivar in water;

a yeast; and

~~a nutrient mixture comprising at least one nutrient selected from the group consisting of nitrogen, phosphorus, potassium, and a combination thereof.~~

8. (original): The inoculum of claim 7 wherein said *Capsicum sp.* cultivar comprises 1 part *Capsicum sp.* cultivar to an amount of between approximately 1 and approximately 120 parts water.

9. (original): The inoculum of claim 8 wherein said *Capsicum sp.* cultivar comprises 1 part *Capsicum sp.* cultivar to an amount of between approximately 10 and approximately 40 parts water.

10. (original): The inoculum of claim 9 wherein said *Capsicum sp.* cultivar comprises 1 part *Capsicum sp.* cultivar to an amount of between approximately 15 and approximately 30 parts water.

11. (original): The inoculum of claim 7 wherein said yeast comprises an amount of between approximately 0.1% and approximately 50% by volume.

12. (original): The inoculum of claim 11 wherein said yeast comprises an amount of between approximately 0.1% and approximately 50% by volume.

13. (original): The inoculum of claim 12 wherein said yeast comprises an amount of between approximately 1% and approximately 20% by volume.

14. (original): The inoculum of claim 7 wherein said nutrient mixture comprises an amount of between approximately 5% and approximately 10% by volume.

15. (original): The inoculum of claim 14 wherein said nutrient mixture comprises an amount of between approximately 1% and approximately 2% by volume.

16. (original): The inoculum of claim 7 wherein said nutrient mixture comprises nitrogen, phosphorus and potassium.

17. (original): The inoculum of claim 16 wherein said nutrient mixture comprises approximately 20-20-20 nitrogen-phosphorus-potassium.

18. (original): The inoculum of claim 7 wherein said *Capsicum sp.* comprises *Capsicum chinense*.

19. (currently amended): A capsaicin fermentation medium for the preparation of a topical pain treatment comprising:

a *Capsicum sp.* cultivar in water;

a carbohydrate;

a yeast culture inoculum; and

a nutrient mixture comprising at least one nutrient selected from the group consisting of nitrogen, phosphorus and/or potassium and a combination thereof.

20. (original): The fermentation medium of claim 19 further comprising a second nutrient mixture comprising at least one member selected from the group consisting of calcium, magnesium, iron, zinc and a combination thereof.

21. (original): The fermentation medium of claim 20 wherein said second nutrient mixture comprises an amount of between approximately 0.001% and approximately 0.01% by weight.

22. (currently amended): The fermentation medium of claim 19 further comprising a micronutrient mixture ~~comprising at least one member selected from the group consisting of manganese, cobalt, copper, and a combination thereof.~~

23. (original): The fermentation medium of claim 22 wherein said micronutrient mixture comprises an amount of between approximately 0.0001% and approximately 0.01% by weight.

24. (original): The fermentation medium of claim 19 wherein said *Capsicum sp.* cultivar comprises 1 part *Capsicum sp.* cultivar to an amount of between approximately 1 and approximately 120 parts water.

25. (original): The fermentation medium of claim 24 wherein said *Capsicum sp.* cultivar comprises 1 part *Capsicum sp.* cultivar to an amount of between approximately 2 and approximately 50 parts water.

26. (original): The fermentation medium of claim 25 wherein said *Capsicum sp.* cultivar comprises 1 part *Capsicum sp.* cultivar to an amount of between approximately 5 and approximately 10 parts water.

27. (original): The fermentation medium of claim 19 wherein said carbohydrate comprise an amount of between approximately 1% and approximately 40% by weight.

28. (original): The fermentation medium of claim 27 wherein said carbohydrate comprise an amount of between approximately 5% and approximately 20% by weight.

29. (original): The fermentation medium of claim 28 wherein said carbohydrate comprise an amount of between approximately 10% and approximately 15% by weight.

30. (original): The fermentation medium of claim 19 wherein said yeast culture inoculum comprises an amount of between approximately 0.11% and approximately 50% by volume.

31. (original): The fermentation medium of claim 30 wherein said yeast culture inoculum comprises an amount of between approximately 1% and approximately 20% by volume.

32. (original): The fermentation medium of claim 31 wherein said yeast culture inoculum comprises an amount of between approximately 5% and approximately 10% by volume.

33. (original): The fermentation medium of claim 19 wherein said nutrient mixture comprises an amount of between approximately 0.1% and approximately 10% by volume.

34. (original): The fermentation medium of claim 33 wherein said nutrient mixture comprises an amount of between approximately 1% and approximately 5% by volume.

35. (original): The fermentation medium of claim 19 wherein said nutrient mixture comprises nitrogen, phosphorus and potassium.

36. (original): The fermentation medium of claim 35 comprises approximately 20-20-20 nitrogen-phosphorus-potassium.

37. (original): The fermentation medium of claim 19 wherein said *Capsicum sp.* comprises *Capsicum chinense*.

Claims 38-82 (Cancelled)

83. (original): The method of claim 37 wherein the step of blending the extract into the oil comprises blending one part of the fermentation extract into an amount of between approximately 5 parts and approximately 10,000 parts of the oil.

84. (new): The inoculum of claim 7 wherein said nutrient mixture comprises nitrogen.

85. (new): The inoculum of claim 7 wherein said nutrient mixture comprises phosphorus.

86. (new): The inoculum of claim 7 wherein said nutrient mixture comprises potassium.

87. (new): The medium of claim 19 wherein said nutrient mixture comprises nitrogen.

88. (new): The medium of claim 19 wherein said nutrient mixture comprises phosphorus.

89. (new): The medium of claim 19 wherein said nutrient mixture comprises potassium.

90. (new): The medium of claim 19 further comprising manganese.

91. (new): The medium of claim 19 further comprising cobalt.

92. (new): The medium of claim 19 further comprising copper.